

WHAT IS CLAIMED IS:

1. An optical disc comprising:
a main area for storing digital data, said main area being divided with a plurality of zones; and

5 a spare area, having a variable area rate within said each zone of main area, for storing said corresponding digital data instead of said main area to prepare an occurring data error due to a defect of said main area.

2. The optical disc as claimed in claim 1, wherein said each rate of spare areas is set to be substantially symmetrical in the advancing direction of an inner circumferential portion and an outer circumferential portion by centring about said
10 centre portion of said optical disc.

3. The optical disc as claimed in claim 1, wherein sizes of said each spare area are set to be gradually increased or decreased in the radius direction of said optical disc.

15 4. The optical disc as claimed in claim 1, wherein sizes of said each spare area are set to be relatively large in the advancing direction of an inner circumferential portion and an outer circumferential portion by centring about said centre portion of said optical disc.

20 5. The optical disc as claimed in claim 1, wherein said optical disc is divided into 23 zones ~~in all~~, and the rates of said spare areas are set such that zone 0 is to 10.73%, zone 1 is to 10.75%, zones 2 and 3 are to 8.06%, zones 4 and 5 are to 5.37%, zones 6 and 7 are to 2.68%, zones 8 to 12 are to 2.69%, zones 13 to 15 are to 2.68%, zones 16 and 17 are to 2.69%, zones 18 and 19 are to 5.37%, zone 20 is to 8.06%, Zone 21 is to 8.05%, zone 22 is to 10.74%, and zone 23 is to 10.73%.

25 6. The optical disc as claimed in claim 1, wherein said optical disc is divided 23 zones ~~in all~~, and the rates of said spare areas are set such that zone 0 is to 8.05%, zones 1 to 3 are to 8.06%, zones 4 and 5 are to 5.37%, zones 6 and 7 are to 2.68%, zones 8 to 12 are to 2.69%, zones 13 to 15 are to 2.68%, zones 16 to 18 are to 5.37%, zones 19 and 20 are to 8.05%, zones 21 and 22 are to 8.05%, and zone 23 is to
30 8.72%.

7. A method for setting spare areas of an optical disc for preparing a
liably-occurring recording error due to a defect of said optical disc,
wherein said method for setting said spare areas of said optical disc is
performed by variably setting said spare area rates of which size rates are variably set in

the radius direction of said optical disc.

8. The method for setting spare areas of an optical disc as claimed in claim 7, wherein said variably-set rates of said spare areas are set to be substantially symmetrical in the advancing direction of an inner circumferential portion and an outer circumferential portion by centring about said centre portion of said optical disc.

9. The method for setting spare areas of an optical disc as claimed in claim 7, wherein said variably-set rates of said spare areas are set to be relatively large in the advancing direction of an inner circumferential portion and an outer circumferential portion by centring about said centre portion of said optical disc.

10. The method for setting spare areas of an optical disc as claimed in claim 7, wherein said variably-set rates of said spare areas are set to be gradually increased or decreased in the radius direction of said optical disc.

add A4

add B5

add C3

add P2